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NOTES ON THE NOMENCLATURE AND TAXONOMIC GROWTH OF THE PLECOPTERA.

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Students of the Plecoptera are fortunate in having up-to-date catalogues and a systematic compendium of the order in the works of Illies (1966) and Zwick (1973). The literature of few orders of insects is so well indexed and the classification so well revised by the most modern methods.

Order and Suborder	Group	Superfamily	Family
Plecoptera			
Antarctoperlaria		Eusthenioidea	Eustheniidae Diamphipnoidae
		Gripopterygoidea (Leptoperloidea)	Austroperlidae Gripopterygidae Gripopteryginae Leptoperlinae Paragripopteryginae Antarctoperlinae
Arctoperlaria	Systelognatha	(Pteronarcyzoidea)	Pteronarcyzoidea
		(Peltoperloidea)	Peltoperlidae
		Perloidea (Subulipalpia)	Perlodidae Perlidae Chloroperlidae
	Euholognatha	Scopuroidea	Scopuridae
		Nemouroidea	Taeniopterygidae Notonemouridae Nemouridae Capniidae Leuctridae

The "Argumentationschema" on p. 2 and the dendrogram on p. 16 of the work by Zwick are to some extent at variance with the classification followed in the catalogue and the systematic index, which is as shown above. The genus *Crypturoperla* is shown in the Schema as of equal rank with the Austroperlidae, but in the catalogue and the systematic index the genus is treated as a member of that family. The Antarctoperlinae are treated in the Schema as of equal rank with the

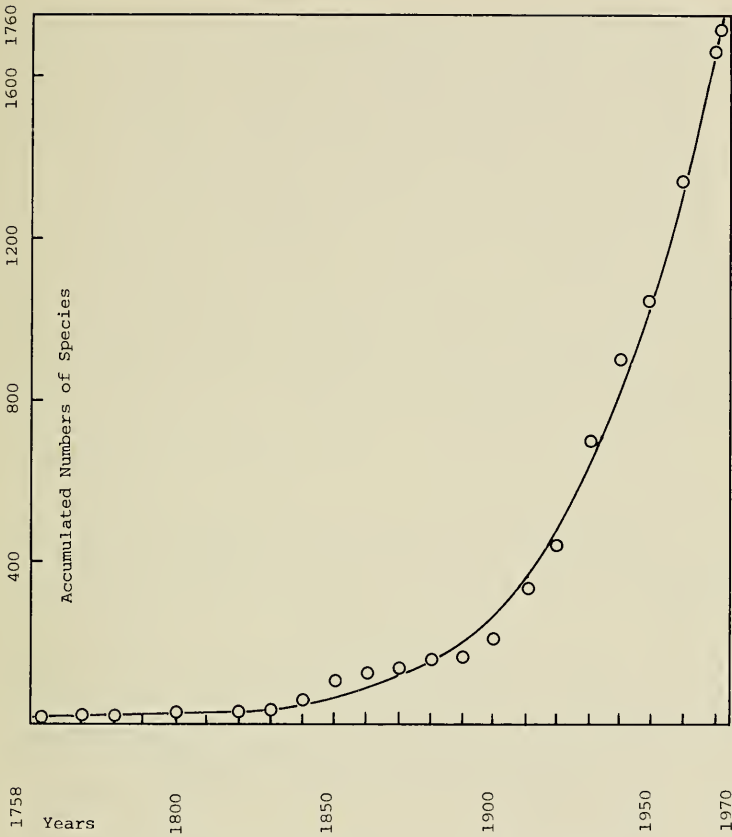


FIG. 7. Taxonomic growth curve of Plecoptera.

families Austroperlidae and Gripopterygidae, while in the catalogue the subfamily is placed under the Gripopterygidae.

The nomenclature of superfamilies in the foregoing chart has been made consistent by the replacement of the names Leptoperloidea and Subulipalpia by names based on those of the oldest included families, Gripopterygidae and Perlidae, respectively.

Inasmuch as the genitive of the Greek word *ἀρκυς* is *ἀρκυος*, which in classical Latin transcription is *arcyis*, the stem of *Pteronarcys* is *pter-onarcy-* and the family-group names based thereupon should be Pteronarcyidae and Pteronarcyioidea.

A few corrections of gender of species-group names should be noted: *Desmoneura pulchellum* should be *D. pulchella*.

Dictyogenus and *Isogenus* should be neuter, inasmuch as the word genus is of that gender in both Latin and Greek ($\gamma\epsilon\nu\omicron\varsigma$). Two species-names should therefore be *Dictyogenus alpinum* and *D. ventrale*.

Etrocorema is neuter; the species-name should be *nigrogeniculatum*.

Perlinodes and *Perlodes* should be masculine according to Art. 30.a.ii (examples) of the Code; the names of 4 species should be *Perlinodes aureus*, *Perlodes frisonanus*, *P. intricatus*, and *P. jurassicus*.

Pseudomegarcys japonicus should be *P. japonica*.

Taenionema should be neuter: *T. californicum*, *T. frigidum*, *T. nigripenne*, *T. oregonense*, *T. pacificum*, *T. pallidum*, *T. raynorum*, *T. van-duzeum*.

The generic name *Apteryoperla* is a strange formation. It probably should have been *Apterygoperla*, but there is no justification under the Code for emending it. A similar condition prevails in regard to the species-name of *Trinotoperla woodwardi*; emendation to *woodwardi* cannot strictly be justified.

A compilation of the dates of original description of the presently recognized species of Plecoptera may be charted as shown in Figure 7. For similar charts of other groups and discussion, see Steyskal (1965, 1967, 1973) and Vecht (1973). The sharply rising curve, with no indication of reversal, indicates that the order is about half known. About as many species as have already been named still await discovery and naming.

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NUMERICAL TAXONOMIC ANALYSIS OF RELATIONSHIPS IN PLECOPTERA.

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The application of numerical taxonomic procedures for analyzing phyletic relationships within the Plecoptera is undertaken. In order